2 3 4 5 NOTES FOR DESIGNER: (DO NOT INCLUDE ON CONSTRUCTION DRAWINGS) 8. REFER TO THE FOLLOWING LANL STANDARDS FOR ADDITIONAL 1. WHEN EDITING DETAIL TO SUIT PROJECT, ADD JOB SPECIFIC REQUIREMENTS AND DELETE ONLY THOSE PORTIONS THAT DO NOT APPLY. TO SEEK A VARIANCE INFORMATION: FROM APPLICABLE REQUIREMENTS, CONTACT THE ESM MECHANICAL POC. A. MASTER SPECIFICATION 33 6300, STEAM ENERGY DISTRIBUTION 2. SIZE CONDENSATE BRANCH LINE NO SMALLER THAN THE TRAP INLET. MINIMUM SIZE IS 3/4". 9. COMPLY WITH ASME B31.1 POWER PIPING. DESIGN STEAM PIPING FOR 150 PSIG AND 500 DEGREES F. 3. USE TWO PRV'S IN SERIES WHEN THE TOTAL REDUCTION IN PRESSURE DESIGN CONDENSATE PIPING FOR 250 DEGREES F. IS MORE THAN A 10 TO 1 RATIO OF THE GAUGE PRESSURE. SEE SHEET 2. SET THE FIRST PRV AT APPROXIMATELY 60 PSIG AND THE SECOND AS REQUIRED. 4. USE TWO PRV'S IN PARALLEL WHEN THE LOAD DEMANDS FLUCTUATE THROUGH A WIDE RANGE. SEE SHEET 3. A. WHEN SPLIT BETWEEN LOADS IS UNKNOWN, SELECT VALVES WITH CAPACITIES OF 1/3 AND 2/3 OF THE MAXIMUM LOAD WITH THE SMALLER VALVE SET AT 2 PSIG HIGHER THAN THE LARGER VALVE. (AS THE LOAD INCREASES, THE PRESSURE DROPS AND THE LARGER VALVE OPENS). 5. RELIEF VALVE SETTINGS (PER 2005 ASHRAE SYSTEMS & EQUIPMENT HANDBOOK, PAGE 10.10) A. REDUCED PRESSURE UNDER 35 PSI: SET RELIEF VALVE AT LEAST 5 PSI HIGHER THAN REDUCED PRESSURE. B. REDUCED PRESSURE ABOVE 35 PSI: SET RELIEF VALVE AT LEAST 10 PSI HIGHER THAN REDUCED PRESSURE. 6. BYPASS AROUND PRV SHALL BE EQUAL TO THE PIPING SIZE INTO PRV. 7. MOISTURE SEPARATOR SHALL BE LINE SIZE. INSTALL ONLY IN BUILDING STEAM SUPPLY LINE TO BUILDING. A. MINIMUM BUILDING SUPPLY LINE SIZE 2 1/2" B. TRAP SIZE AND CONDENSATE PIPING SIZE SHALL BE THE SAME SIZE AS THE MOISTURE SEPARATOR DRAIN PORT. MINIMUM SIZE 3/4". DRAWING DEVELOPED FOR ML-3/ ML-4 PROJECTS. FOR ML-1/ ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN IN-SERTED INTO A DRAWING PACK-AGE).

> ADMIN. CHANGES TO CAD STD. REV#5 3 | 06-23-2017 | UNCLASS | FORMAT REVISED TITLE BLOCK. ADDED NOTES FOR DESIGNER #9 AND REVISED #6 2 01-04-2006 REVISED NOTES. DWG. NO. WAS 08-13-2003 DATE DC DWN DSGN CHKD SUB APP DESCRIPTION

6

ENGINEERING STANDARDS

DRAWN

DESIGN

R.PEARSON

R.FROST

C.DUPRE

OF

DATE: 06-28-1999

MECHANICAL

STEAM PRV STATION DETAIL

DESIGN NOTES BLDG- XX

CHECKED DATE 06-28-1999 APPROVED FOR RELEASE STANDARDS MANAGER: TOBIN ORUCH

SUBMITTED DISCIPLINE POC: GURINDER GREWAL

Los Alamos

PO Box 1663 Los Alamos, New Mexico 87545 REVIEWER: LARRY BAYS DRAWING NO ST-D3020-2

TA- XX PROJECT ID **CHAPTER 6**